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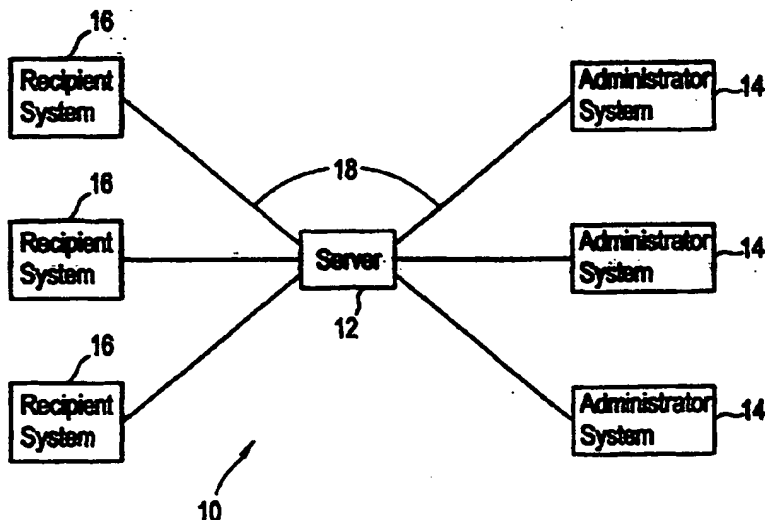
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- (71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US).
- (72) Inventor: HARABURDA, Scott, S.; 5850 Hartman Road, Mount Vernon, IN 47620 (US).
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(54) Title: METHOD AND SYSTEM FOR SCREEN SAVER BASED COMMUNICATIONS



(57) Abstract: An exemplary embodiment of the invention is directed to a method for distributing information. An administrator system is used to create information for display at a recipient system. The information is transferred to a storage device over a network and stored at the storage device. A screen saver application at the recipient system accesses the information over the network and displays the information at the recipient system. Another exemplary embodiment of the invention is a communications system including an administrator system for creating information for display at a recipient system. A storage device is coupled to the administrator system through a network and receives and stores the information from the administrator system. A recipient system accesses the information from the storage device over the network. The recipient system includes a screen saver application which automatically accesses the information and displays the information at the recipient system.

## METHOD AND SYSTEM FOR SCREEN SAVER BASED COMMUNICATIONS

### BACKGROUND OF THE INVENTION

The invention relates to a method and system for screen saver based communications. Effective communications within an organization are important to internal and external work performance. Traditional communications techniques such a voice mail, conference calls, e-mail announcements, bulletin board postings, employee meetings, and one-on-one discussions all serve a purpose, but all these methods of communications have drawbacks. For example, e-mail must be accessed and opened by a recipient. In certain situations, recipients may not be trained in operation of the e-mail applications software and may have difficulty opening and viewing attachments to e-mail. Accordingly, distributing information to recipients through e-mail has limitations.

### BRIEF SUMMARY OF THE INVENTION

An exemplary embodiment of the invention is directed to a method for distributing information. An administrator system is used to create information for display at a recipient system. The information is transferred to a storage device over a network and stored at the storage device. A screen saver application at the recipient system accesses the information over the network and displays the information at the recipient system.

Another exemplary embodiment of the invention is a communications system including an administrator system for creating information for display at a recipient system. A storage device is coupled to the administrator system through a network and receives and stores the information from the administrator system. A recipient system accesses the information from the storage device over the network. The recipient system

includes a screen saver application which automatically accesses the information and displays the information at the recipient system.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of an exemplary communications system;

FIG. 2 depicts an exemplary file directory; and

FIG. 3 depicts storage of information based on group identifiers.

#### DETAILED DESCRIPTION OF THE INVENTION

An exemplary embodiment of the invention is a system for distributing information to a plurality of recipients which uses the recipient's screen saver program to present the information to the user. Existing screen saver programs are used to prevent burn-in of the screen surface of the display device by producing time varying patterns after a period of inactivity. Commercially available computer screen-saver applications include a slide show function in which the screen saver application accesses files for sequential display. An exemplary embodiment of the invention uses a screen saver having a slide show function to provide information to recipients.

FIG. 1 is a block diagram of a communications system 10 in an exemplary embodiment of the invention. The communications system 10 provides for communications between one or more administrator systems 14 and one or more recipient systems 16. Communication is performed over a network 18 and through a server 12. The server 12 provides a storage device for storing files for display at recipient systems 16. As described herein, other systems may be used as storage devices. Network 18 may be any type of network including a local area network (LAN), a wide area network (WAN), a global network (e.g., Internet), etc. Each administrator system 14 may be

implemented through a computer having appropriate software and hardware to provide for transmission of information between the administrator system 14 and the server 12 over network 18. Each recipient system 16 may be implemented through a computer having appropriate software and hardware to provide for transmission of information between the recipient system 16 and the server 12 over network 18.

In communications system 10, information is generated and/or updated at the administrator systems 14 and transmitted and stored at server 12. The information stored at server 12 is then accessible by each recipient system 16. Each recipient system 16 is configured, as described below, to identify files for display. Information from each administrator system 14 may be of a variety of types. For example, the information may be in the form of files to be viewed at the recipient systems 16 and may have a variety of formats (e.g., text, graphics, etc.). Each administrator system 16 may be used by an administrator associated with a particular type of information as described in more detail herein.

One type of administrator may be a safety leader, who maintains common safety files, such as accident investigation reports, OSHA recordables, upcoming meetings, safety topics, and other safety-related items. Another type of administrator may be a member of a communications team, who would maintain common communication files, such as company athletic team results, civic award presentations to someone in the organization, announcements of upcoming visits, employee service anniversaries, etc. Another administrator may be an employee from human resources, who would maintain the common personnel related files, such as job postings, new employee introductions (with a photograph of a new employee), new holiday schedules, and changes to the personnel policies. Yet another administrator may be an individual who monitors measurable manufacturing data. This person would update measurement

graph files. Each recipient system 16 in the manufacturing environment may access a unique set of files for display. For example, the missed shipment rates may be displayed in the shipping/receiving section. The production yield may be displayed in the control room. Equipment maintenance delays may be displayed in the maintenance section. Production status reports may be displayed on a production manager's computer.

The screen saver application running on each recipient system 16 accesses files for display at the recipient system 16 based on a file directory stored at each recipient system 16. FIG. 2 depicts an exemplary file directory 30 including a file number 32 and a file location 34. As the screen saver program is executing, the screen saver application accesses each file based on the file directory 30. Access of each file may occur in a variety of ways including sequentially, randomly, pseudo-randomly, etc. The files may be located on the server 12 or on another system (such as a recipient system 16, administrator system 14 or other system) which has sharing rights with the accessing recipient system 16.

In an alternate embodiment, information is accessed by recipient systems 16 based on a recipient group identifier. FIG. 3 depicts an exemplary format for storing information on the server 12, or other location, for access by recipient systems 16. The information is stored in groups where each group includes a group identifier 22 and a series of one or more files 24 which are viewable at recipient systems 16. Each recipient system 16 may be configured with one or more recipient group identifiers which indicate the groups of files 24 that the recipient system 16 may access. A recipient system 16 is allowed to access files stored in groups having a group identifier 22 matching the recipient group identifier. As described herein, the files 24 are accessed by a screen saver application at the recipient system and displayed at the

recipient system 16. In an exemplary embodiment, one group of files (e.g., group1) may be common files that are accessible by all recipient systems 16. An alternate group of files (e.g., group2) may be safety files which would be accessible by recipient systems 16 configured to access this group of files. Yet another group of files (e.g., group3) may be manufacturing files which would be accessible by recipient systems 16 configured to access this group of files. Accordingly, the group identifier 22 and recipient group identifier control distribution of information to recipient systems 16.

The administrator systems 14 are used to provide the information to be received at the recipient systems 16. The user of an administrator system 14 or administrator has authority to change the content of the files associated with that administrator. These updated files would be available and displayed immediately by the recipient systems 16 on the network 18. Thus, a safety director may access the files and update, edit and otherwise modify the files. Access to files, on the server 12 or at other locations, can be controlled through the use of passwords so that an unauthorized user cannot modify files.

In addition, secure files to be viewed at only predetermined recipient systems 16 may be encrypted using conventional encryption applications. The files may be encrypted at the administrator system 14 or at the server 12 at the direction of an administrator. Recipient systems 16 would then need to include the encryption application and the appropriate key in order to decrypt the file for viewing.

Operation of the communications system 10 will now be described. An administrator at an administrator system 14 creates files for viewing by one or more recipient systems 16. The files may be stored at predetermined locations as shown in FIG. 2 or stored associated with a group identifier 22 as shown in FIG. 3. The screen saver application running on the recipient system 16 automatically accesses files and displays

these files at the recipient system 16. This may be done by consulting a file directory 30 and retrieving files in response to the file locations 34. Alternatively, the screen saver application may access files stored in a group based on a group identifier. The screen saver application at each recipient system 16 accesses the files directly from the server 12 over network 18. Accordingly, the user does not need to perform any operations (e.g., open e-mail attachments) to view the information.

The present invention can be embodied in the form of computer-implemented processes and apparatuses for practicing those processes. The present invention can also be embodied in the form of computer program code containing instructions embodied in tangible media, such as floppy diskettes, CD-ROMs, hard drives, or any other computer-readable storage medium, wherein, when the computer program code is loaded into and executed by a computer, the computer becomes an apparatus for practicing the invention. The present invention can also be embodied in the form of computer program code, for example, whether stored in a storage medium, loaded into and/or executed by a computer, or transmitted over some transmission medium, such as over electrical wiring or cabling, through fiber optics, or via electromagnetic radiation, wherein, when the computer program code is loaded into and executed by a computer, the computer becomes an apparatus for practicing the invention. When implemented on a general-purpose microprocessor, the computer program code segments configure the microprocessor to create specific logic circuits.

While the invention has been described with reference to exemplary embodiments, it will be understood by those skilled in the art that various changes may be made and equivalents may be substituted for elements thereof without departing from the scope of the invention. In addition, many modifications may be made to adapt a particular situation or material to the teachings of the invention without departing from the

essential scope thereof. Therefore, it is intended that the invention not be limited to the particular embodiments disclosed for carrying out this invention, but that the invention will include all embodiments falling within the scope of the appended claims.



**WHAT IS CLAIMED IS:**

1. A method for distributing information comprising:

using an administrator system to create information for display at a recipient system;

transferring said information to a storage device over a network;

storing said information at said storage device; and

providing a screen saver application at said recipient system, said screen saver application accessing said information over said network and displaying said information at said recipient system.

2. The method of claim 1 further comprising:

configuring said recipient system with a file directory including a plurality of file locations;

wherein said accessing said information over said network is in response to said file locations.

3. The method of claim 1 further comprising:

associating said information with a group identifier;

wherein said accessing said information over said network includes accessing said information in response to said group identifier.

4. The method of claim 3 further comprising:

creating a recipient group identifier at said recipient system;

wherein said accessing said information over said network includes accessing said information in response to said recipient group identifier and said group identifier.

5. The method of claim 1 wherein:

said storage device is a server.

6. The method of claim 1 further comprising:

encrypting said information prior to said screen saver application accessing said information over said network; and

decrypting said information at said recipient system.

7. The method of claim 3 wherein:

said group identifier identifies a group of common files accessible by all recipient systems.

8. The method of claim 3 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving safety information.

9. The method of claim 3 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving manufacturing information.

10. The method of claim 1 wherein:

said network is the Internet.

11. A storage medium encoded with machine-readable computer program code for distributing information, the storage medium including instructions for causing a computer to implement a method comprising:

using an administrator system to create information for display at a recipient system;

transferring said information to a storage device over a network;

storing said information at said storage device; and

providing a screen saver application at said recipient system, said screen saver application accessing said information over said network and displaying said information at said recipient system.

12. The storage medium of claim 11 further comprising instructions for causing said computer to implement:

configuring said recipient system with a file directory including a plurality of file locations;

wherein said accessing said information over said network is in response to said file locations.

13. The storage medium of claim 11 further comprising instructions for causing said computer to implement:

associating said information with a group identifier;

wherein said accessing said information over said network includes accessing said information in response to said group identifier.

14. The storage medium of claim 13 further comprising instructions for causing said computer to implement:

creating a recipient group identifier at said recipient system;

wherein said accessing said information over said network includes accessing said information in response to said recipient group identifier and said group identifier.

15. The storage medium of claim 11 further comprising instructions for causing said computer to implement:

encrypting said information prior to said screen saver application accessing said information over said network; and

decrypting said information at said recipient system.

16. The storage medium of claim 13 wherein:

said group identifier identifies a group of common files accessible by all recipient systems.

17. The storage medium of claim 13 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving safety information.

18. The storage medium of claim 13 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving manufacturing information.

19. The storage medium of claim 11 wherein:

said network is the Internet.

20. A communications system comprising:

an administrator system for creating information for display;

a storage device coupled to said administrator system through a network, said storage device receiving and storing said information from said administrator system; and

a recipient system for accessing said information from said storage device over said network, said recipient system including a screen saver application, said screen saver application automatically accessing said information and displaying said information at said recipient system.

21. The system of claim 20 further comprising:

a file directory at said recipient system, said file directory including a plurality of file locations;

wherein said accessing said information is in response to said file locations.

22. The system of claim 20 wherein:

said storage device associates said information with a group identifier; and

said screen saver application accesses said information in response to said group identifier.

23. The system of claim 22 wherein:

said recipient system includes a recipient group identifier;

wherein said accessing said information includes accessing said information in response to said recipient group identifier and said group identifier.

24. The system of claim 20 wherein:

said storage device is a server.

25. The system of claim 20 wherein:

said administrator system encrypts said information prior to transferring said information to said storage device; and

said recipient system decrypts said information.

26. The system of claim 22 wherein:

said group identifier identifies a group of common files accessible by all recipient systems.

27. The system of claim 22 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving safety information.

28. The system of claim 22 wherein:

said group identifier identifies a group of files accessible by recipient systems for receiving manufacturing information

29. The system of claim 20 wherein:

said network is the Internet.

FIG. 1

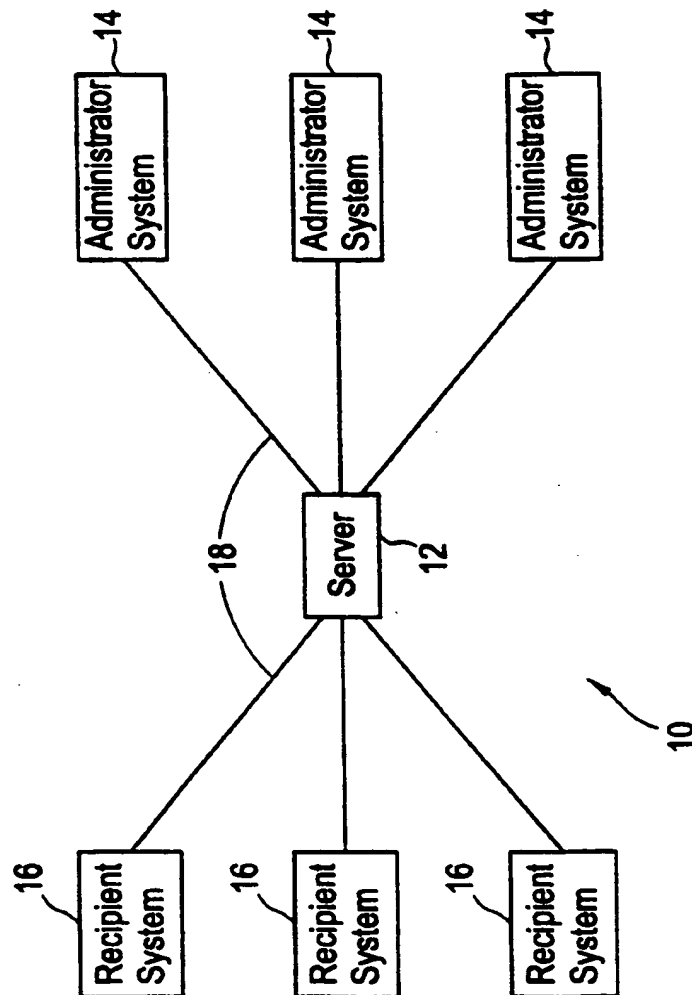




FIG. 2

30

32	FILE NUMBER	FILE LOCATION	34
	1	j:\safety\file1	
	2	n:\safety\file6	
	3	j:\manufacturing\file2	
	4	j:\manufacturing\file3	
	5	o:\personnel\file1	
	...	...	
	N	o:\personnel\file2	

FIG. 3

